## **Exhibit 300: Capital Asset Summary**

## Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

Date Investment First Submitted: 2011-02-25
Date of Last Change to Activities: 2012-07-25
Investment Auto Submission Date: 2012-02-27
Date of Last Investment Detail Update: 2012-03-27
Date of Last Exhibit 300A Update: 2012-08-23

Date of Last Revision: 2012-08-23

**Agency:** 021 - Department of Transportation **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

**1. Name of this Investment:** FAAXX725: Terminal Automation Modernization and Replacement Phase III (TAMR3)

2. Unique Investment Identifier (UII): 021-299431462

Section B: Investment Detail

 Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.

Terminal Automation Modernization and Replacement TAMR Phase III [TAMR3] is the FAA's third acquisition program focusing on the FAA's terminal air traffic control capabilities across the entire NAS. TAMR3 continues a phased approach to modernizing and replacing the automation systems at the FAA's TRACONs and their associated Control Towers. On April 21, 2010 the TAMR3 program office received JRC approval to divide the program into two segments to better address near term objectives. Seg.1 will address infrastructure improvements essential for the adoption of Automatic Dependent Surveillance - Broadcast (ADS-B) before the end of Fiscal Year 2017. The TRACONS covered under the scope of Seg.1 are: N. California, S. California, Potomac, Atlanta, Dallas-Ft. Worth, New York, Louisville, Denver, Minneapolis, St. Louis, and Chicago. In the first three years of Seg.1, TAMR3 will procure long lead hardware, develop and test improvements to software to enable ADS-B functionality, and demonstrate this functionality at the FAA's WJHTC. This hardware and first build of software will be operational at the Dallas-Ft. Worth (key/first site) by 2013 and will be operational with the 2nd software build at all eleven sites by 2017. On Dec. 15, 2010 the JRC gave Seg.1 Authorization to Proceed to replace the existing CARTS IIIE air traffic control management systems at the eleven (11) sites with Standard Terminal Automation Replacement System (STARS) hardware and software components. This

equipment is necessary to prevent market obsolescence conditions and to enable the adoption of near-term NextGen capabilities at those sites. A Final Investment Decision (FID) for Seg.1 was granted on Dec. 21, 2011. During FY13, Seg.1 will commence installations in accordance with the approved baseline and waterfall schedule. Segment 2 will replace 94 ARTS IIE systems with STARS hardware, software, and displays at the TRACONs and their associated Air Traffic Control Towers (ATCTs) not modernized by earlier TAMR programs. FID for Seg.2 is expected in July, 2012. In FY13 Seg.2 will test STARS for IIE at WJHTC, purchase STARS for a Key Site and 5 additional IIE sites, Site Prep 4 sites and install at 4 sites. Seg.2 activities will complete the convergence of all CARTS systems to a single automation system in the Terminal domain. The program has dependencies with Terminal Primary Surveillance (TPS), FAA Telecommunications Infrastructure (FTI), STARS, and ADS-B.

2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.

TAMR3 provides the vital automation link between the terminal radars, flight planning, and weather systems, and the air traffic controllers in the terminal facilities. The enhancements performed as part of this investment are crucial to the FAA's ability to implement NextGen technologies. Specifically, they will be critical to adoption of FAA's Automatic Dependent Surveillance-Broadcast (ADS-B) services. This is a GPS based technology that allows aircraft to transmit their GPS determined position to ATC display systems as quickly as once every second, as opposed to once every 4 seconds for a short range radar or once every 13 seconds for an even slower turning long range radar. The additional processing capability provided in the hardware and software upgrades are necessary in order for the terminal automation systems to function with the addition of so much more incoming data. TAMR3 are required to continue enabling the Agency to meet future operational requirements, address hardware and commercial end-of-life issues, sustain operational suitability, incorporate future operational requirements, and keep the terminal automation systems running reliably throughout the NAS. TAMR Phase 3 improves Safety and Effective Throughput by providing for increased system Adjusted Operational Availability and enhanced functionality for Air Traffic Controllers, including ADS-B services. Should this program not be fully funded, ADS-B will not be implemented within the NAS in the near term and overall FAA Goals of Improved Safety and Effective Throughput will be jeopardized.

3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.

In 2011 TAMR Segment 1 ordered long-lead STARS hardware for eleven ARTS IIIE sites and commenced development of STARS software enhancements to enable ADS-B implementation. In 2011 TAMR 3 Segment 2 continued Investment Analysis in support of a Final Investment Decision (FID) in FY12. An Alternatives Analysis was also in development for FID.

4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).

In FY2012 TAMR Phase 3 will achieve FID. Segment 1 will continue procurement of hardware, development/testing of software enhancements, and complete installation at the Segment 1 Key Site. In FY2013 Segment 1 will commission the initial Key Site, and install systems at 2 additional sites, and Segment 2 will initiate procurement of STARS systems to address the 94 ARTS-IIE sites in accordance with the baseline and waterfall approved at the FID.

5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.

2008-10-31

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

1.				
		Table I.C.1 Summary of Funding		
	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$6.0	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$33.5	\$59.9	\$108.3	\$152.6
DME (Including Planning) Govt. FTEs:	\$7.1	\$3.3	\$1.6	\$1.6
Sub-Total DME (Including Govt. FTE):	\$46.6	\$63.2	\$109.9	\$154.2
O & M Costs:	\$0.0	\$14.6	\$26.8	\$59.0
O & M Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.0
Sub-Total O & M Costs (Including Govt. FTE):	0	\$14.6	\$26.8	\$59.0
Total Cost (Including Govt. FTE):	\$46.6	\$77.8	\$136.7	\$213.2
Total Govt. FTE costs:	\$7.1	\$3.3	\$1.6	\$1.6
# of FTE rep by costs:	52	22	10	10
Total change from prior year final President's Budget (\$)		\$39.9	\$10.0	
Total change from prior year final President's Budget (%)		105.51%	7.89%	

2. If the funding levels have	changed from the FY	2012 President's Budget request	for
PY or CY, briefly explain thos	se changes:		

FY12 funding increase due to FY12 appropriation adjustment.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

	Table I.D.1 Contracts and Acquisition Strategy												
Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Туре	PBSA ?	Effective Da	Actual or Expected End Date		
Awarded	6920	DTFA0102D030 06											
				Solicitation	Contract	rpe of /Task Order ricing)	PBSA	Effective d	ate Extent	Competed	Short description of acquisition		
					Firm F	ixed Price	N	2002-10-3	1	U			

Awarded	6920	DTFA0196C030 08	
Awarded	6920	DTFAWA09C0 0039	
Awarded	6920	DTFAWA09C0 0040	
Awarded	6920	DTFAWA09C0 0041	
Awarded	6920	DTFAWA09C0 0042	
Awarded	6920	DTFAWA09C0 0052	
Awarded	6920	DTFAWA09C0 0053	
Awarded	6920	DTFAWA09C0 0078	
Awarded	6920	DTFAWA09D00 030	
Awarded	6920	DTFAWA09D00 032	
Awarded	6920	DTFAWA10A00 018/0001	

Solicitation ID	Type of Contract/Task Order (Pricing)	PBSA	Effective date	Extent Competed	Short description of acquisition
	Firm Fixed Price	Υ	2010-04-13	U	FUNDING TAS::69

Awarded 6920 <u>DTFAWA10C0</u> 0099

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why: EVM will be implemented on a Program basis following FID. FAA policy requires EVM on contracts of more than \$10 Million. TAMR 3 is in compliance with this requirement.

# **Exhibit 300B: Performance Measurement Report**

**Section A: General Information** 

**Date of Last Change to Activities: 2012-07-25** 

#### Section B: Project Execution Data

		Table II.B.	1 Projects		
Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
6	FID, Segment 1	Acquire Final Investment Decision from JRC for ART IIIE Replacement.			
7	Contract Definitization	Finalize terms of prime contract.			
8	Software Development	Modify STARS baseline software for TAMR3 functionality.			
9	Site Deployment	Install and test STAR.S at first 3 sites.			
10	FID, Segment 2	Acquire Final Investment Decision from JRC for ARTS IIE Replacement.			

#### **Activity Summary**

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M)	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
6	FID. Seament 1							

7 Contract Definitization8 Software

## **Activity Summary**

### Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M)	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
	Development							
9	Site Deployment							
10	FID, Segment 2							

				Key Deliverables				
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
6	Segment 1 Joint Resource Council Decision Meeting	Acquire pre-approvals, and pepare & present briefing to Joint Resource Council decision meeting	2011-12-21	2011-12-21	2011-12-21	173	0	0.00%
6	Segment 1 Analysis for Joint Resource Council Decision	Perform Analyses for FID	2011-12-31	2011-12-31	2011-12-21	395	10	2.53%
7	Prime Contract Negotiations	Definitize, Negotiate and Execute Contract with Prime Vendor	2012-05-31	2012-07-12		243	-92	-37.86%
10	Joint Resource Council Decision Decision, Segment 2	Perform Analyses, Acquire pre-approvals, and pepare & present briefing to Joint Resource Council decision meeting	2012-07-31	2012-08-31		212	-31	-14.62%
9	Dallas TRACON (D10) and Operational Support Facility	Equpment Order and Delivery to Dallas	2012-07-31	2012-07-31	2012-04-25	182	97	53.30%
9	Northern California TRACON and Operational Support Facility	Equipment Order and Delivery to Northern California TRACON	2012-09-30	2012-09-30		183	0	0.00%
9	Dallas TRACON (D10) and Operational	Dallas Site Prep	2012-09-30	2012-09-30		299	0	0.00%

	Key Deliverables									
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)		
	Support Facility									
9	Northern California TRACON (NCT) and Operational Support Facility	Northern California TRACON Site Prep	2012-11-30	2012-11-30		224	0	0.00%		

## Section C: Operational Data

			Table	II.C.1 Performance M	etrics			
Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
STARS Adjusted Equipment Availability	Percent	Technology - Information and Data	Over target	99.700000	99.950000	99.970000	99.970000	Monthly
STARS Security Breaches	Number	Technology - Information and Data	Under target	0.000000	0.000000	0.000000	0.000000	Semi-Annual
STARS Data Processing Reserve Capacity	Percent	Technology - Information and Data	Over target	41.500000	50.000000	50.000000	50.000000	Semi-Annual
On-Time Arrivals at CORE Airports	Percent	Customer Results - Timeliness and Responsiveness	Over target	88.000000	88.000000	88.000000	88.000000	Semi-Annual
Flight Delays Directly Attributable to STARS	Number	Mission and Business Results - Support Delivery of Services	Under target	110.000000	10.000000	0.000000	10.000000	Semi-Annual